PRODUCT: D945PLNM (Standard BIOS)

BIOS Version 0159

About This Release:
- September 07, 2007
- NM94510J.86A.015.2007.0905.2027
- Initializing Intel(R) Boot Agent FE v4.1.17
- Intel® Platform Administrator Agent Version 2.0.4.199.

New Fixes/Features:
- Implemented changes to support the ITK Map File Specification version 1.15.
- Added ITK Data Var Type 3 to store VAREQ variable.
- Fixed issue where IIA or ITK could not set boot order correctly.
- Fixed an intermittent failure seen with EFI_VARIABLE in Windows* environment.
- Fixed issue where ITK/IIA could not set Boot Order if the Boot Menu Type in the BIOS Setup was set to Advance.
- Fixed issue where ITK or IIA could not read boot drives' model strings.
- Fixed issue where ITK or IIA could not access Boot Priority List when all the boot devices disabled in the BIOS Setup.

BIOS Version 0156

About This Release:
- July 19, 2007
- NM94510J.86A.0156.2007.0718.2022
- Initializing Intel(R) Boot Agent FE v4.1.17
- Intel® Platform Administrator Agent Version 2.0.4.199.

New Fixes/Features:
- Updated processor support.
- Fixed flashing custom BIO file does not set OEM Default settings.
- Added support for writing a new variable through bio capsule.
- Fixed issue where 200G SATAII HDD sometimes reports only 133G.
- Fixed issue where IPAT hard disk protection will be disable.
- Fixed issue where Flashing a large BMP Logo caused inability to reflash and possibly not boot.

BIOS Version 0151

About This Release:
- April 09, 2007
- NM94510J.86A.0151.2007.0408.2155
- Initializing Intel(R) Boot Agent FE v4.1.17
- Intel® Platform Administrator Agent Version 2.0.4.199.

*Other names and brands may be claimed as the property of others.

New Fixes/Features:
- Added support for Winbond W25X80 8Mb SPI part.
- Updated processor support.
- Fixed system hang during booting up if Use Automatic Mode and Use Serial ATA set to disable under Drive Configuration page in BIOS setup.
- Changed temperature display from C to °C.
- Fixed the system hang for 10 to 15 seconds after F9 & F10 operation in BIOS Setup.

BIOS Version 0150

About This Release:
- November 14, 2006
- NM94510J.86A.0150.2006.1114.0848
- Initializing Intel(R) Boot Agent FE v4.1.17
- Intel® Platform Administrator Agent Version 2.0.4.199.

New Fixes/Features:
- Updated Intel® Platform Administrator Agent Version 2.0.4.199
- Removed 2.5V from Hardware monitor page.
- Fixed long boot time on every 4th or 5th boot.
- Fixed issue where Setup incorrectly displayed processor frequency as 3.6GHz instead of 3.06GHz.
- Setup Date option change day to 01 if the current day is invalid for the selected month or year.

BIOS Version 0135

About This Release:
- August 22, 2006
- NM94510J.86A.0135.2006.0817.1032
- Initializing Intel(R) Boot Agent FE v4.1.17
- Intel® Platform Administrator Agent Version 2.0.2.180.

New Fixes/Features:

- Updated Intel® Platform Administrator Agent Version 2.0.2.180.

BIOS Version 0129

About This Release:
- June 08, 2006
- NM94510J.86A.0129.2006.0608.0128
- Initializing Intel(R) Boot Agent FE v4.1.17
- Intel® Platform Administrator Agent Version 2.0.1.156.

For boards with 0121 or earlier BIOS versions, when you update to version 0129 in the DOS environment, you must use command "iflash /rb /pf xxxx.bio" otherwise the flash will fail.

New Fixes/Features:
- Updated Intel® Platform Administrator Agent Golden Release 2.0.1.156.
- Removed AUX fan from Hardware monitor page.

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- Fixed fan speed display corrupted when the fan unplug.
- Removed Flex Language Module support.
- Replaced all CPU badges with Intel Master Brand logo badge.
- Added support for reporting capsule invocation results.
- Added feature to display BIOS Setup string "Intel(R) Integrator Toolkit has modified this BIOS." when appropriate.
- Added Thermal Diode support for new processors.
- Added code to honor greyed-out or hidden options when loading F9 Setup Defaults.
- Fixed issue with FSB Frequency BIOS Setup option reverting to 133 when current value is greater than 256.
- Fixed a problem where the variable update would fail. Symptoms seen are that the system would hang at POST code 5Ah.
- Fixed possible variable area corruption.
- Added wide glyph fonts support.
- Fixed Legacy Floppy and USB Flash Drive not accessible from DOS.
- Enable USB Keyboard during only POST even if USB Legacy is disabled in Setup.
- Fixed a problem where BIOS Setup displays a wrong installed Language name on Language selection menu.
- Fixed certain ATM card reader causing POST delay when USB Legacy "Enabled."
- Allowed PCI and PCIe devices to wake from S4 when 'ACPI Suspend State' set to S1.
- Added 1333 Front Side Bus Frequency Override.
- Added code to prevent programming of the remap registers.
- Updated CNR and KFD support.
- Fixed issue where PS/2 mouse is not functional when PS/2 keyboard is not connected.
- Fixed a problem where greater than 4Gb of memory did not work.
- Enabled FERR# as break event.
- OSB badge logo transparent color support
- Added support for SMBIOS event log.
- Added Flex Variable write support.
- Flex Language Module Support.
- Fixed primary bootblock full issue.
- Added riser card support on motherboard PCI slot 2.
- Fixed the problem where operating system could not get Wake up cause after resuming S4.
- Updated to new Performance BIOS Setup interface.
- Fixed Floppy Configuration BIOS Setup menu items no display correctly.
- Added Onboard LAN Mac Address display in Bios Setup.
- Clear wake event status from PCIe Root Port registers
- Added a new feature for System Wake from S5.
- Added SOP (Security Override Protection) support and new mechanism of detecting boot modes.
- Reduced S3 resume time for high frequency locked processors (>=3.6Ghz).
- Added CD recovery support for all SATA ports.
- Added support for duplicating SLP string to multiple locations with a single BIOS.
- Removed trailing spaces from present SMBIOS strings.
- Fixed issue where certain SATA controller device would be disabled after an S3.

- Fixed issue where certain SCSI card would not function properly.
- Fixed Yellow Bang on PCI-PCI bridge on PCie cards.
- Fixed issue where certain host adapter cards were not functional.
- Modified IRQ table to evenly distribute IRQs for devices.
- Fixed a problem where PEG video devices that contains bridges does not work as the primary video device.
- Fixed a problem where the CD-ROM drives was not detected in RAID mode.
- Fixed display of cache for multi-core processors.
- Fixed incorrect Front & Rear fan speed tach setting on BTX/uBTX form factors.
- Fixed issue where Iflash, reboot method (/rb), would fail to update the BIOS ID.
- Fixed a problem where Boot Order in Setup will revert back to default if the user "ESC" from other sub-menu.
- Fixed an issue where the system hangs while resuming from S3, when certain processors are present.
- Prevent 'up arrow' key from entering Setup.
- Fixed microcode block being corrupted after Bios update.
- Fixed slow recovery which take 60-120 seconds.

BIOS Version 0121

About This Release:
- May 23, 2006
- NM94510J.86A.0121.2006.0522.2312
- Initializing Intel(R) Boot Agent FE v4.1.17
- Intel® Platform Administrator Agent Version 2.0.0.100.

New Fixes/Features:
- Removed CD recovery support for all SATA ports.
- Fixed post code change to 00 on S4 wake up when using Sspec CPU.
- Fixed a problem where the system would "hang" at POST code 34h for ~3minutes before it continued to boot.
- Updated to latest PXE code : Intel(R) Boot Agent PXE Base Code (PXE-2.1 build 085)
- Fixed incorrect Fan 2 mapping for Full Duty.
- Fixed issue with CPU All Fans On temp needing a -3 offset for user defined BMI sequences.
- Fixed to block system recovery to the BIOS.

BIOS Version 0103

About This Release:
- April 20, 2006
- NM94510J.86A.0103.2006.0420.1742
- Initializing Intel(R) Boot Agent FE v4.1.17
- Intel® Platform Administrator Agent Version 2.0.0.100.

New Fixes/Features:
- Added One-button Service.
- Added support for new 8Mbit SPI flash devices.
- Improved PCI OpRom memory map size determination method.
- Added feature to allow changing USB flash drive DOS emulation from BIOS SETUP.

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- Fixed various issues with variables.
- IDE code changes to make POST faster and more reliable.
- Fixed intermittent system hang at POST code 92.
- Set REF Drive Strength to 2X.
- Fixed BIOS Version update failure during Iflash update.
- Updated Express BIOS Update (EBU) file properties copyright date to 2006.
- Fixed issue where some BIOS SETUP question options were not highlighted correctly.
- Fixed consecutive read and/or writes of password supplied secure variables.
- Added support to enable PECI.
- Fixed a problem where the system would take ~20 sec extra to complete POST.
- Added USB recovery feature.
- Fixed issue where some CompactFlash-to-SATA cards were not accessible in DOS.
- Fixed issue where USB mice would not work with option ROMs and DOS applications that take direct hardware control of IRQ12 and the 8042 keyboard controller without using BIOS INT15 C2xx mouse functions.
- Fixed issue where USB 2.0 speed was not working under BIOS USB legacy support.
- Changed USB Legacy driver so that UHCI & EHCI PCI controllers are dynamically detected and removed the need to have controller PCI addresses specified in a product file.
- Fixed issue where USB keyboard LEDs were unable to be updated by software through the BIOS Data Area (BDA).
- Fixed issue where system may hang in DOS accessing USB flash drives.
- Fixed FDD test failure on certain floppy drives.
- Added SOP (Security Override Protection) support and new mechanism of detecting boot modes.
- Added CD recovery support for onboard PATA controller.
- "CMOS Timer Not Set" event has incorrect event count and incorrect time stamp.

BIOS Version 0072

About This Release:
- March 23, 2006
- NM94510J.86A.0072.2006.0322.1544
- Initializing Intel(R) Boot Agent FE v4.1.17
- Intel® Platform Administrator Agent Version 2.0.0.100.

New Fixes/Features:
- Initial release

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